



EKO-SP

power of nature



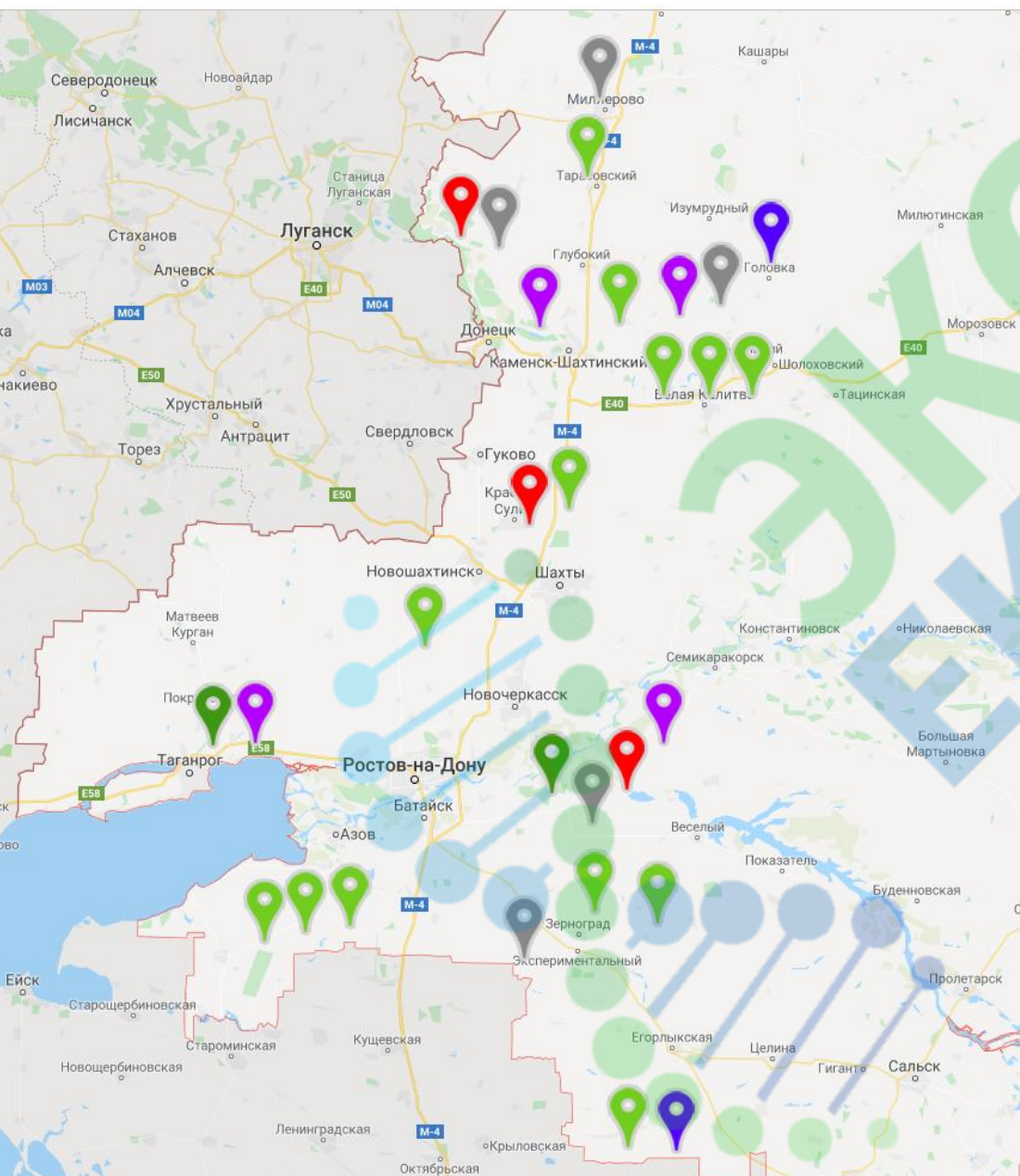
The results of the industrial use of the EKO-SP agrochemical at agricultural enterprises of Rostov region.



**Humic acids
new generation**

EKO-SP.RU

The use of the EKO-SP agrochemical based on humic acids in agricultural enterprises of Rostov region in 2019.



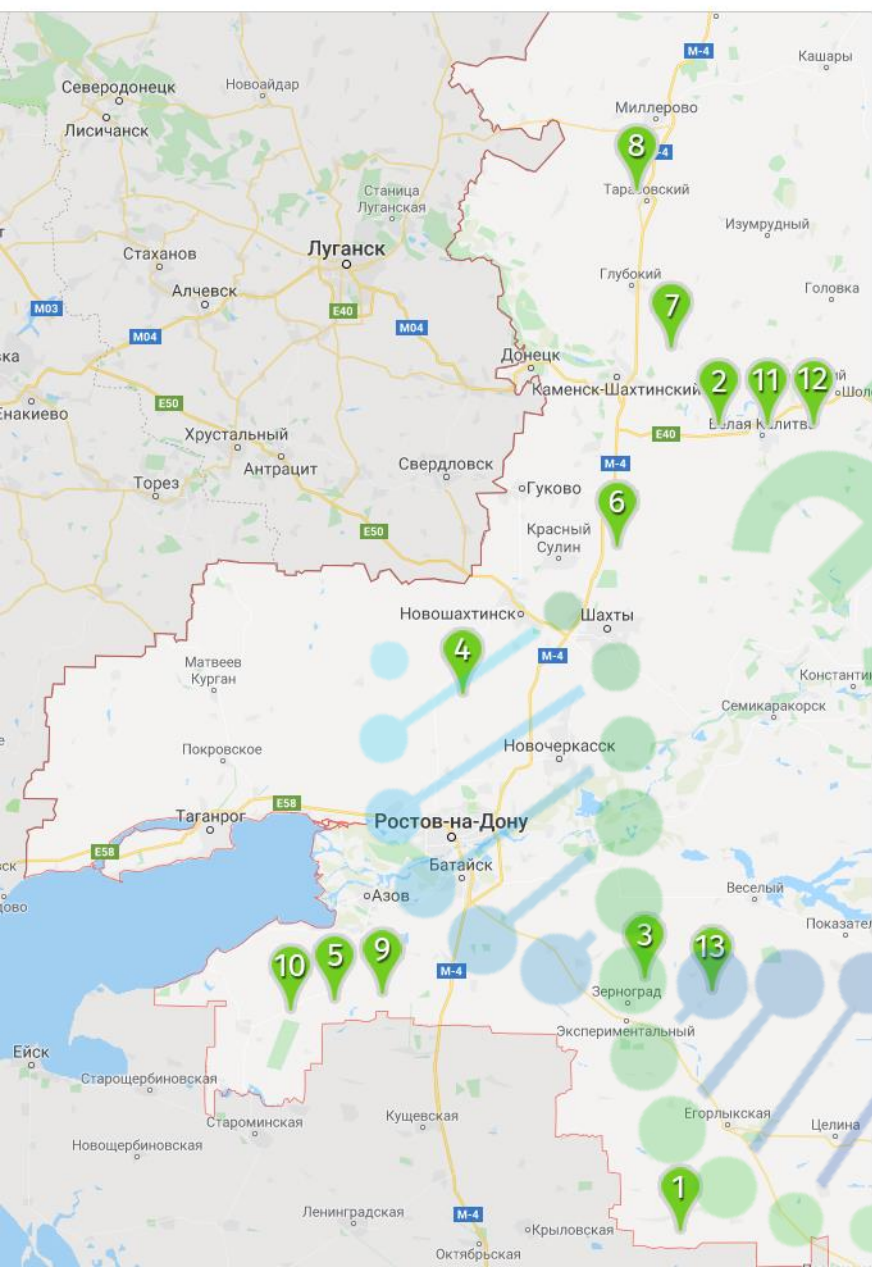
- Positive indicators for cereal crops (13)
- Solid performance for other crops (2)
- Negative indicators (3)
- No differences identified (5)
- They haven't fulfilled the terms of the agreement (4)
- Incomplete harvesting in other crops (2)

The total number of agricultural tests - **29 pcs.**

The total area of agricultural tests - **886 ha.**

Agricultural crops:
wheat, barley, sunflower, peas.

Positive indicators for winter wheat/barley when applying the EKO-SP agrochemical based on humic acids in agricultural enterprises of Rostov region in 2019.



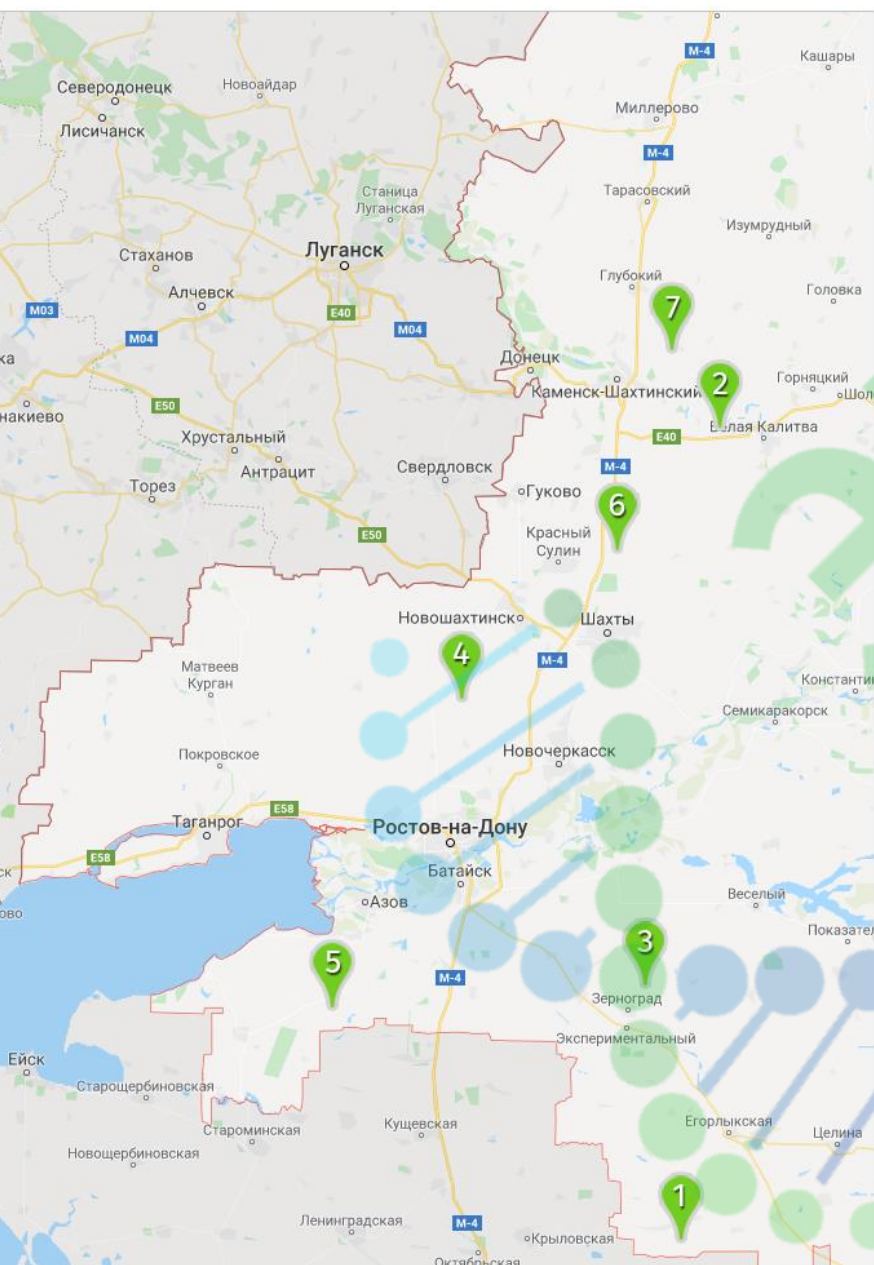
№	Name of the enterprise	Area, ha.	Dosage, l / ha number of treatments	Cropping capacity			
				Control	EKO-SP	Increase in quintals	Increase in %
1	Tkach Company	10	1,0*3	43	45,6	2,6	6
2	Kapylov Company	5	1,0*2	37	38,5	1,5	4
3	Streltsov Company	15	1,0*2	39	41	2	5
4	Blagodarnaya Company	26	0,5*3	52	55	3	6
5	Butskov Company	10	1,0*2	32	35	3	9
6	Dubrava Agricultural Company	30	0,7*2	14,8	15,3	0,5	9
7	Berezovy Farm	30	0,5*2	15,3	17,2	1,9	6
8	Tarasovskaya Company	120	0,5*2	25,6	28,3	2,7	10,5
9	Blagodarnoye-A Company	44	0,6*1	44	46,4	2,4	5,5
10	Blagodarnoye-A Company	30	0,5*3	47,4	51,2	3,8	8
11	Druzhba Company	15	0,7*3	29,13	29,72	0,59	2
12	Blagodarnaya Company	20	0,5*2	35,9	38,7	2,8	8

Average indicators on increase in **2,3 cwt per 1 ha** and **7%**.

Positive pea yields

№	Name of the enterprise	Area, ha.	Dosage, l / ha number of treatments	Cropping capacity			
				Control	EKO-SP	Increase in quintals	Increase in %
13	Klyuev Company	26	0,5*2	24,17	37,61	13,44	56

7 agricultural trials (out of 12 positive agricultural experiments) improved both quantitative and qualitative indicators of winter wheat productivity.



№	Name of the enterprise	Area, ha	Options	Results		
				Gluten,%	Protein,%	Nature g/l
1	Tkach Company	10	Control	21	12	709
			«EKO-SP»	23	14,1	730
			Increase, c	2	2,1	21
			Increase, %	9,5	17,5	3
2	Butskov Company	10	Control	32	20	809
			«EKO-SP»	35	22	735
			Increase, c	3	2	21
			Increase, %	9	10	3
3	Dubrava Company	30	Control	26	16,2	689
			«EKO-SP»	28	15	695
			Increase, c	2	-1,2	6
			Increase, %	8	-8	0,9
4	Berezovy Farm	30	Control	-	12,7	701
			«EKO-SP»	-	13,3	723
			Increase, c	-	0,6	22
			Increase, %	-	5	3
5	Tarasovskaya Company	120	Control	19	12	735
			«EKO-SP»	22	13	741
			Increase, c	3	1	6
			Increase, %	16	8	0,8
6	Blagodarnoye-A Company	44	Control	20	12,1	754
			«EKO-SP»	20	12,2	765
			Increase, c	-	0,1	11
			Increase, %	-	0,8	1,5
7	Blagodarnoye-A Company	30	Control	-	12,42	-
			«EKO-SP»	-	12,99	-
			Increase, c	-	0,5	-
			Increase, %	-	5	-

The results of a biometric survey of experimental plots on the basis of FSBI "ANC Donskoy" The experimental Zernograd district as of June 4, 2019

Control



48g

Agrochemical "EKO-SP"



58g

Demonstration crops were presented at Don Field Day in 2019



№	Company	Weight of 20 ears, g	% to control	Average spike length	% to control
1	«EKOR-SP», «EKO-SP»	58	120	87,75	111
2	Control	48	100	79,35	100

The analysis of the results of a biometric examination of the test plots allows us to conclude that the double use of the EKO-SP agrochemical on vegetative plants of winter wheat brought one of the best results regarding stimulating and activating plant processes, which led to an increase up to **20%** in the average weight of one piece of wheat and there is an increase in piece of wheat length by **11%**.



МИНИСТЕРСТВО СЕЛЬСКОГО ХОЗЯЙСТВА
РОССИЙСКОЙ ФЕДЕРАЦИИ
ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ
УЧРЕЖДЕНИЕ
«РОССИЙСКИЙ СЕЛЬСКОХОЗЯЙСТВЕННЫЙ
ЦЕНТР»
(ФГБУ «РОССЕЛЬХОЗЦЕНТР»)
ФИЛИАЛ ПО РОСТОВСКОЙ ОБЛАСТИ



«УТВЕРЖДАЮ»
Руководитель филиала
Т. Г. Заднепровский

«16» июля 2019 г.

**ОТЧЕТ О ПРОВЕДЕНИИ
ДЕМОНСТРАЦИОННЫХ ИСПЫТАНИЙ
АГРОХИМИКАТА НА ОСНОВЕ
ГУМИНОВЫХ КИСЛОТ «ЭКО-СП»
В РОСТОВСКОЙ ОБЛАСТИ**

г. Ростов-на-Дону
2019

Average biological yield of winter wheat in the pilot plot increased up to 56.5 cwt/ha, its increase reached **5.7 cwt/ha**, which is **11.2%** of the average yield of the control plot (50.8 cwt/ha).

The average weight of the root system increased by **16.7%**, with a tendency to increase the number of productive stems and the weight of 1000 grains.



The FSBI «Rosselkhoztsentr» report on conducting demonstration tests of the agrochemical based on humic acids «EKO-SP» in the Rostov region gave the following results.

According to the results of harvesting of the site for agro-testing by «EKO-SP» agricultural agent, the indicators of winter wheat yield on the control and experimental plots are calculated.

Results of winter wheat yield determination

№	Option	Average number of shoots, pcs/m ²	Average number of productive stems, pcs/m ²	Weight of 1000 grains, g	Biological yield, cwt/ha	Increase in control	
						cwt/ha	%
1	Control	428	1926	42,5	50,8	-	-
2	Test	436	1960	47,6	56,5	5,7	11,2

Results of determining the average mass of the root system in the phase of milk and wax ripeness of grain.

№	Option	Average weight of root system, g	Increase in control	
			g	%
1	Control	48	-	-
2	Test	56	8	16,7

TEST

CONTROL



Analysis of the results of biometric examination of experimental plots gives grounds to conclude that the inclusion of agrochemical «EKO-SP» in the system of protective measures of winter wheat stimulates and activates the course of physiological processes. This has led to an increase in the number of productive stems of the average weight of grain and the average weight of the root system of plants.

Differences in the development of the root system during experiments in containers using the agrochemical "EKO-SP".



Wheat: 1/1 control, 1/2 seeds treatment, 1/3 seed and soil treatment

Differences in the development of the root system during experiments in containers using the agrochemical "EKO-SP".



Sunflower: 4/1 control, 4/2 seeds treatment, 4/3 seed and soil treatment

The difference in the development of the root system of sunflower in the field, after treatment during the growing season with the agrochemical «EKO-SP»

AGROCHEMICAL «EKO-SP»

CONTROL



The economic efficiency of the use of the agricultural chemical "EKO-SP" on crops of grain crops

	Agricultural tests of "EKO-SP"	FBSI "Rosselkhoztsentr"
Yield increase,%	7	11
Average productivity in large farms, cwt / ha	40	40
Additional fee in centners from 1 ha.	2,8	4,4
Additional fee in cash equivalent at a grain cost of 175\$ / ton	49	77
Application rate, l / ha	1	1
Number of treatments, pcs	2	2
The cost of 1 liter, \$		
The cost of double processing on vegetation, \$		
Additional costs, \$	no	no
Additional profit per 1 ha, \$	44	72
The ratio of costs for 2-fold processing to profit	1 to 9	1 to 14

Findings:

EKO-SP agrochemical improves the mineral nutrition and metabolism of plants, accelerates their growth, development and provides protection against phytopathogens.

- 1 Increases the nutritional chemicals absorption
- 2 Enhances photosynthesis and metabolic rate
- 3 Strengthens the plant immune system
- 4 Strengthens the development of the root system
- 5 Stimulates the phytoalexins production
- 6 Improves the quality of agricultural products

Conclusion:

Control and manufacturing agricultural tests have proved that the fertilizer based on humic acids «EKO-SP» produced by the company «EKO-SP» promotes agricultural crop to realize its genetic capacity of productivity and quality. The economic efficiency of using an agrochemical in agrotechnologies of grain crop high agriculture ranges from 900 % to 1400 %. The additional profit from increasing productivity and quality is 9 \$ - 14 \$ for each 1 \$ invested.

The additional productivity is from 2.3 to 4.4 centners per hectare using the agrochemical «EKO-SP» in the tank mixture together with pesticides. A company using the agrochemical will receive additional profit in the amount of \$ 44 to \$ 72 with an average productivity of 40 centners per 1 ha.

The «EKO-SP» humic agricultural product helps to reduce bacterial and fungus disease involvement, transfers nutrients into forms that are readily available for absorption which makes it possible to optimize the use of chemical protective agents and fertilizers, increase their effectiveness and, as a result, reduce application rates through its influence on the plant's immune system.



EKOR - SP

«EKOR-SP» **Product Company** is an active player in the market of organomineral biological products for agriculture and environmental protection. The company was founded in 2017 to produce innovative high-quality biopreparations of unique characteristics providing competitive advantages to our Partners and Clients.

The mission of «EKOR-SP» is to extract and transform forces of Nature for the benefit of Russia.

Concentrated potassium humate with «EKO-SP» microelements for crop farming (production) is a new generation of high-quality complex organomineral fertilizers with a full set of: fertilizer elements (NPK), humic acids, fulvic acids, amino acids, low-molecular organic acids, micro and macro chelated elements.

Achievements: Highest hemic content and recovery index for biopreparations.

EKORSP.RU



EKOR - SP

PRODUCTION COMPANY
(Moscow region)





EKO - SP

power of nature

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